## Math -2: Lesson 1-5 VOCABULARY

Absolute Value of a number: The distance the number is from zero on the number line. $|3|=3 \quad|-3|=3$

Solution to an Absolute Value equation (or inequality): The values that can be substituted into the variable that "make the statement true". $\quad|x|=3 \quad \rightarrow \quad x= \pm 3$

$$
|x|=-5 \quad \text { Has no solution because distances are never negative. }
$$

General form Absolute Value equation: $\quad|x-c|=d$ Means: "The numbers ('x') that are exactly "d" units
away from the center number " $c$ " on the number line.


$$
\begin{gathered}
|x-3|=2 \\
x=3 \pm 2 \\
x=1,5
\end{gathered}
$$

General Absolute Value Inequality: "What numbers are greater than (or less than) units away from the center number "c" on the number line?"


$$
x<(c-d) \text { OR } x>(c+d)
$$


$(c-d)<x<(c+d)$

